

### **Abstract**

The invention relates to a membrane electrode unit for electrochemical apparatuses, in particular for direct methanol fuel cells (DMFC) and a method for the production thereof. The multilayer MEUs for DMFC according to the invention comprise of an anode gas diffusion substrate, an anode catalyst layer, an ionomer membrane, a cathode catalyst layer and a cathode gas diffusion substrate, the anode catalyst layer being applied to the anode gas diffusion substrate, while the cathode catalyst layer is present directly on the membrane.

Improved power values in combination with reduced precious metal consumption can be achieved thereby.